



RS-232C

User's Manual

For use with DL170

DL170

interface

Operating instructions

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Introduction

The optional RS-232C interface will be installed by Pitney Bowes.

RS-232C interface cable

The RS-232C port on your RS-232C interface has a *DB-25* (standard 25-pin serial) *female receptacle* which accepts a *male DB-25 cable plug*. Your computer's port may have either a DB-25 or *DB-9* (9-pin) receptacle.

If necessary, see the chart below for detailed information on the *pin assignment* for your fax machine's RS232C port.

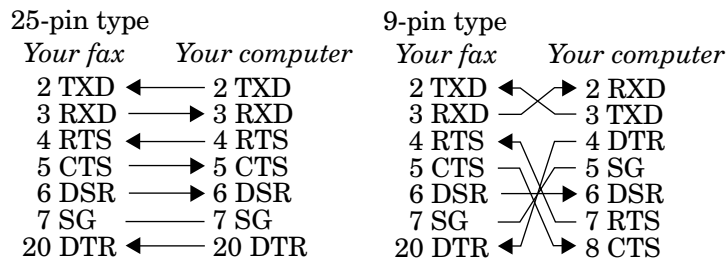
Note: For more information on your *computer's* serial interface port, see your computer's operating instructions.

Note: Please use RS-232C interface cable shorter than 3 meters.

Pin assignment

Pin No.	Signal code	Signal name	Contents
2	TXD	Transmitted data	Data signal sent from computer to your fax.
3	RXD	Received data	The data sent to computer by your fax.
4	RTS	Request to send	Signal for request to send data.
5	CTS	Clear to send	Data Enable signal for data transmission from your fax to your computer.
6	DSR	DCE ready	Turning on always.
7	SG	Signal ground	Ground for signal.
20	DTR	DTE ready	Data Terminal Enable - ready to communicate

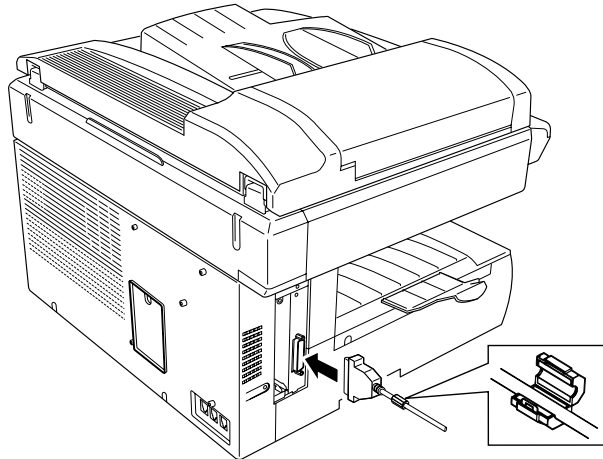
Signal direction



Setting up

To complete your machine's setup, follow the steps below.

1. Attach the ferrite core to your RS-232C interface cable.
2. Connect one end of the RS-232C cable to the *RS-232C port* on your fax machine.



3. Connect the other end of the RS-232C cable to your computer's RS-232C port.

Note: If you don't know where your computer's RS-232C port is, check the computer's operating instructions

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Operation

Your fax machine isn't only a fax — it can also be an image scanner for your computer.

Setting your fax machine

Requirements for your computer

To use your fax's RS-232C interface, you must first properly install class1 software on your computer.

Pitney Bowes has tested this interface with the following software titles:

- Unimessage Xlite Ver. 2.0
- Unimessage Pro Ver. 1.0
- BitWare™ Ver. 3.30
- BitWare™ Plus Ver. 4.0
- WinFax PRO™ Ver. 4 for Windows 3.1¹ and Ver.7 for Windows 95¹
- LaserFax™ Ver. 3.5

Note: While this RS-232C interface should work with most fax software, there may be some fax packages with which it may not work. If you experience trouble, please confirm that you are following all instructions correctly and in the right order. If you still have trouble, please contact the manufacturer of your fax software package.

Note: Before continuing with these instructions, you must first install fax software on your computer.

Making the RS-232C settings

Note: You must make the following settings every time you change your fax software.

Note: The parameters for the following settings should be listed in your fax software. If you choose the wrong RS-232C parameters, the fax machine cannot communicate with your computer.

1. Press **Program key, F, 1, 0, 3, ENTER.**

The LCD shows the fax's RS-232C transmission speed (*baud rate*) in bps (*bits per second*):

Baud Rate :Variable ←/→/Enter

Note: This setting is just for the RS-232C port. It does not change the speed at which your machine sends faxes.

2. Press ◀ or ▶ to choose the appropriate baud rate for your computer and software. The settings are: *Variable*; or *600, 1200, 2400, 4800, 9600* or *19200 bps*. When you see the setting you want, press **ENTER**.

Note: If using one of the following Pitney Bowes-tested packages, select *Variable*:

- BitWare™ Ver. 3.30
- BitWare™ Plus Ver. 4.0
- WinFax PRO™ Ver. 4 for Windows® 3.1 or Ver.7 for Windows® 95

3. Press ◀ or ▶ to choose the *data parity*. Choose between *None*, *Odd*, or *Even*. Then press **ENTER**.

Parity :None ←/→/Enter

4. Press ◀ or ▶ to toggle the *stop bit* between 1 bit or 2 bit. When you see the setting you want, press **ENTER**.

Stop Bit	:1 bit
◀/→/Enter	

5. Press ◀ or ▶ to toggle the *data length* between 7 bit or 8 bit. When you see the setting you want, press **ENTER**.

Data Length	:8 bit
◀/→/Enter	

Initializing your machine

1. Make sure your fax is connected to your computer (see page 3).
2. *Computer:* Make sure that your fax software is running and in *receive* mode.
Note: If necessary, consult your fax software's instructions.
3. *Fax machine:* Press **Program key, F, 1, 0, 2, ENTER**.

PC-FAX Connection

It will take a few moments to initialize the settings.

Using your DL170 PC connection

Note: While DL170 is communicating with your PC using the RS-232C interface cable, it can not receive a fax message from other fax machine.

Scanning from your fax to your computer

You can store logos, signatures, line art or even photographs onto your computer by using the fax machine to *scan* to your computer:

1. Make sure your fax is connected to your computer (see page 3).
2. *Fax machine:* Insert the document. Adjust resolution and contrast if necessary.
3. *Computer:* Instruct your fax software to *receive*.
Note: If necessary, consult your fax software's instructions.
4. *Fax machine:* Press **Program key, F, 1, 0, 1, ENTER**.

PC-FAX Scan	
A4	Memory 99%

Your fax software will now “receive” the fax (including the TTI, if you’ve set one) onto your computer. To cancel the scanning operation while it’s in progress, just press **STOP**. (To cancel the job after scanning the document, consult your software’s operating instructions.)

Printing from your computer to your fax

With the RS-232C interface installed, you can also print documents from your computer to your fax.

1. Make sure your fax is connected to your computer (see page 3).
2. *Computer:* Use your application — for example, a word-processing program — to send the document to your fax software, just as if you were actually going to fax the document.

3. *Fax machine:* Make sure that you have stored your *subscriber ID* (your fax number) on your machine. (see your DL170 Operating guide.)
4. *Computer:* When the fax software asks for a fax number to which to send the document, enter your subscriber ID.
5. *Computer:* Instruct your fax software to *transmit*. The fax machine will begin to print.

Sending/receiving faxes with your computer

You can receive documents from another fax onto your computer, as well as transmit documents from your computer to other faxes. As with scanning, the exact procedure for sending/receiving will vary depending upon your computer's fax software.

Note: Consult your software's operating instructions for more details.

1. Make sure your fax is connected to your computer (see page 3).
2. *Computer:* Instruct your fax software to send or receive. The fax machine will begin either transmitting or receiving.

“AT” commands

Note: This is a list of standard “AT” modem commands. For more information, please consult your fax software's instructions.

Command	Parameter	Description	Default value
A	none	Call answer	
D	0 - 9, *,#	Dial number	
	P	Pulse dial	
	T	Tone dial	
	,	Pause	
E	0	Not echo command character	E0
	1	Echo command character	
H	0	On Hook (Disconnect line)	
	1	Off Hook (Connect line)	
M	0	Monitor speaker is always off	M1
	1	Monitor speaker is on until carrier is detected	
	2	Monitor speaker is always on	
P	none	Set pulse dial mode	
T	none	Set tone dial mode	
V	0	Short formed response code	V1
	1	Long formed response code	
Z	none	Reset modem	
&F	none	Initialize to factory setting	
\Q	1	XON/XOFF flow control	\Q2
	2	RS/CS flow control	
+FCLASS?	none	Indicate current service class	
+FCLASS=?	none	Indicate service class capability	
+FCLASS=n	none	Set service class	
+FRH=n	none	Receive HDLC frame (n=3:300 bps)	
+FLO=n	none	XON/XOFF flow control (n=1)	+FLO=2
	none	RS/CS flow control (n=2)	
+FRM=n	none	Facsimile receive message (14400/12000/9600/7200/4800/ 2400 bps)	
+FRS=n	none	Detect silence for n x 10ms	
+FTH=n	none	Transmit HDLC frame (n=3:300 bps)	
+FTM=n	none	Facsimile transmit message (14400/12000/9600/7200/4800/ 2400bps)	
+FTS=n	none	Wait for n x 10ms	



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